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DEPT. OF WATER, ENERGY, AND ENVIRONMENT

Jim Pillen, Governor

AIR QUALITY GENERAL CONSTRUCTION PERMIT

PERMIT NUMBER: GCP-CRUSH-2 **Permit Name: Aggregate Processing Plant**

Project Description: Aggregate Processing Plant (Portable and Stationary)

Typical Standard Industrial Classification (SIC) Code: 1429, Crushed and Broken Stone, Not Elsewhere Classified

Typical North American Industry Classification System (NAICS) Code: 212319, Other Crushed and Broken Stone Mining and Quarrying

Pursuant to Chapter 10 of the Nebraska Air Quality Regulations, the public has been notified by prominent advertisement of the proposed construction of air contaminant sources meeting the specific criteria of this general construction permit and the thirty (30) day period allowed for comments has elapsed. This general construction permit approves the construction of specific types of Aggregate Processing Plants. This permit document and the associated application make up the complete permit for the specific source identified in the application.

Compliance with this permit shall not be a defense to any enforcement action for violation of an ambient air quality standard. The permit holder, owner, and operator of the facility shall assure that the installation, operation, and maintenance of all equipment is in compliance with all of the conditions of this permit.

The undersigned issues this permit on behalf of the Director under the authority of Nebraska Administrative Code Title 129 – Nebraska Air Quality Regulations as amended September 28, 2022.

November 3, 2025

Date

Reuel S. Anderson, Administrator
Permitting and Engineering Division

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ABBREVIATIONS, SYMBOLS, and UNITS OF MEASURE

AP-42	Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources
BACT	Best Available Control Technology
bhp	Brake Horsepower
BMP	Best Management Practice
Btu	British Thermal Unit
bu	Bushel
CAA	Clean Air Act
CE	Control Equipment
CEM	Continuous Emissions Monitor
CEMS	Continuous Emissions Monitoring System
cf	Cubic feet
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	CO_2 equivalent
CP	Construction Permit
DGS	Distiller's Grains with Solubles
DDGS	Dry Distillers Grains with Solubles
dscf	Dry Standard Cubic Feet
dscfm	Dry Standard Cubic Feet per Minute
EMIS	Emergency Management Information System
EPA	Environmental Protection Agency
EQC	Environmental Quality Council
EP	Emission Point
ESP	Electrostatic Precipitator
EU	Emission Unit
FID	Facility Identification Number
FDCP	Fugitive Dust Control Plan
FGR	Flue Gas Recirculation
FIP	Federal Implementation Plan
FR	Federal Register
ft	Feet
FTIR	Fourier Transform Infrared
GHGs	Greenhouse Gases
H_2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutant
hp	Horsepower
hr	Hour
lb	Pound
LDAR	Leak Detection and Repair
LNB	Low-NO_x Burner
MACT	Maximum Achievable Control Technology
Mgal	One Thousand gallons
MMBtu	One Million British Thermal Units
MMscf	One Million Standard Cubic Feet
MSDS	Material Safety Data Sheet
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NDWEE	Nebraska Department of Water, Energy, and Environment
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
PAL	Plant-wide Applicability Limit
Pb	Lead (chemical abbreviation)
PbR	Permit-by-Rule
PEMS	Parametric Emissions Monitoring System
PM	Particulate Matter
PM_{10}	Particulate Matter with and aerodynamic diameter equal to or less than 10 microns
$PM_{2.5}$	Particulate Matter with and aerodynamic diameter equal to or less than 2.5 microns
ppb	Parts per Billion
ppm	Parts per Million
ppmv	Parts per Million by volume
ppmvd	Parts per Million by volume, dry basis
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RVP	Reid Vapor Pressure
RATA	Relative Accuracy Test Audit
RMP	Risk Management Plan
RTO	Regenerative Thermal Oxidizer
scf	Standard Cubic Feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_x	Sulfur Oxides
TDS	Total Dissolved Solids
TO	Thermal Oxidizer
TO/HRSG	Thermal Oxidizer with Heat Recovery Steam Generator
tpy	Tons per year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate Matter
ULNB	Ultra Low-NO_x Burner
UST	Underground Storage Tank
UTM	Universal Transverse Mercator
VHAP	Volatile Hazardous Air Pollutant
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WDGS	Wet Distiller's Grains with Solubles

I. STANDARD CONDITIONS

The following Standard Conditions apply to this permit unless otherwise provided for in the Specific Conditions of this permit.

(A) Regulatory authority:

(1) Title 40 Protection of Environment, Code of Federal Regulations that apply to the source including those not currently delegated to Nebraska or not yet included in Title 129; and

(2) Title 129 as approved by EPA under 40 CFR Part 52, Subpart CC or 40 CFR Part 70, Appendix A as of the date of issuance of this permit (federally enforceable requirements); and Title 129 as amended September 28, 2022 (state only enforceable requirements).

(B) The source shall allow the NDWEE, USEPA or an authorized representative, upon presentation of credentials (Neb. Rev. Statute §81-1504; Title 129, Chapter 6, Section 003.11) to:

(1) Enter upon the source's premises during reasonable hours where a source subject to this permit is located, emissions-related activity is conducted, or where records must be kept under the conditions of this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(2) Have access to and copy, during reasonable hours, any records that must be kept under the conditions of this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(3) Inspect during reasonable hours any facilities, pollution control equipment, including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(4) Sample or monitor, during reasonable hours, substances or parameters for the purpose of ensuring compliance with the permit or applicable requirements.

(C) All requested permit amendments and revisions must adhere to the requirements of Title 129, Chapter 9.

(D) The following methods may be used to determine compliance with the terms and conditions in this permit (Title 129, Chapter 15, Section 005.08):

(1) Any compliance test method specified in the State Implementation Plan;

(2) Any test or monitoring method approved for the source in a permit issued pursuant to Title 129, Chapters 3, 4, or 13, Section 004;

(3) Any test or monitoring method provided for in Title 129; or

(4) Any other test, monitoring, or information-gathering method that produces information comparable to that produced by any method described in Condition I.(D)(1) through (3).

(E) Application for review of plans or advice furnished by the Director will not relieve the source of legal compliance with any provision of these regulations, or prevent the Director from enforcing or implementing any provision of these regulations (Title 129, Chapter 1, Section 001.06).

(F) If and when the Director declares an air pollution episode as defined in Title 129, Chapter 2, Section 006.01, the source shall immediately take all required actions listed in Title 129, Appendix II, Paragraph 1.1, 1.2, and 1.3, respectively, until the Director declares the air pollution episode terminated (Title 129, Chapter 2, Section 006.03).

(G) Recordkeeping: To ensure compliance with this permit, records shall be maintained as outlined below. Records include: electronic and/or paper copies of all application materials, notifications, reports, test protocols, test results, and plans; and, electronic and/or original paper copies of all required monitoring results, measurements, inspections, and observations (Title 129, Chapter 15, Section 005.06; Neb. Rev. Stat. §81-1504):

(1) All records required by this permit shall be kept for a minimum of five (5) years and shall be clear and readily accessible to NDWEE representatives during an inspection, unless otherwise specified in this permit.

(2) Monthly calculations and records required throughout this permit shall be compiled no later than the fifteenth (15^{th}) day of each calendar month and shall include all records and calculations generated through the previous calendar month, unless otherwise specified in this permit.

(3) The source shall keep the following records for each malfunction, start-up and shutdown where emissions were, or may have been, in excess of an emission limitation or standard (Title 129, Chapter 11, Sections 002 and 005; Chapter 15, Sections 006.02, 006.04 and 006.05):

(a) The identity of the equipment.

(b) Reason for, or cause of, the malfunction, shutdown, or start-up.

(c) Duration of period of excess emissions.

(d) Date and time of the malfunction, shutdown, or start-up.

(e) Physical and chemical composition of pollutants whose emissions are affected by the action.

(f) Methods, operating data, and/or calculations used to determine these emissions.

(g) Quantification of emissions in the units of the applicable emission control regulation.

(h) All measures utilized to minimize the extent and duration of excess emissions during the malfunction, shutdown, and start-up.

(4) The source shall keep records of maintenance performed on components of permitted emission units that would affect or potentially affect the emission rate of that unit and on control and monitoring equipment associated with the permitted emission unit (Title 129, Chapter 15, Sections 005.06, 006.06B, and 006.06E).

(5) All records of opacity readings, instrument readings, visual equipment inspections, log book/sheet entries, and any other record of equipment performance shall identify the individual who entered the record, except for continuously generated electronic records.

(6) Operation and maintenance manuals, or equivalent documentation, detailing proper operation and maintenance of all permitted emission units, required control equipment and required monitoring equipment shall be kept for the life of the equipment

(H) All permitted emission units, associated emissions conveyances, required control equipment, and required monitoring equipment shall be properly installed, operated, and maintained (Title 129, Chapter 6, Sections 003.01 and 003.13; Chapter 15, Section 005.06; Neb. Rev. Stat. §81-1504 and §81-1506).

(1) All emissions from emission units using required controls shall be captured and routed through associated emission conveyances to the required control equipment, except for uncaptured emissions described in the permit application and any additional information submitted prior to permit issuance.

(2) All equipment must be maintained to minimize the amount of uncontrolled pollutants that are-released to the atmosphere. Proper equipment maintenance activities may include repair or replacement, and include, but are not limited to activities in response to the following:

(a) cracks, holes or gaps,

(b) broken, cracked, or otherwise damaged seals or gaskets, and

(c) broken, missing or open hatches, access covers, caps, or other closure devices.

(I) When the source makes physical or operational changes to an emissions unit or associated control equipment that may cause an increase in emissions that makes the original testing not representative of current operating conditions or emissions, the source shall submit a notification of the change. Such notification shall be received by NDWEE within fifteen (15) days after such change. The NDWEE may require performance testing based on review of the specific changes identified in the notification and the resulting potential impact on emissions from the unit(s) and/or performance of the control equipment (Title 129, Chapter 15, Section 005.01).

(1) This notification requirement applies to emissions units and/or control equipment that meet the following requirements, except as provided in Condition I.(I)(5):

(a) Emissions from the emissions unit and/or control equipment is subject to an emissions limit;

(b) A valid performance test has been conducted for the pollutant to which the emissions limit applies;

(c) Changes that may cause emissions to increase or invalidate prior testing include, but are not limited to, increasing the capacity of an emissions unit, changing the operational parameters of any control equipment outside of the range allowed for under this permit that makes the control equipment less efficient, changing the type of scrubber packing, or increasing the inlet pollutant loading of any control equipment.

(2) For emission units that have had a performance test conducted after January 1, 2012, the source shall make a one-time notification to the NDWEE within fifteen (15) days of when there is a 10% increase in daily production/throughput rate, over the tested rate recorded during the most recent valid performance test unless otherwise specified in this permit. If there are subsequent 10% increases over the rate most recently notified to the NDWEE, the source shall make a one-time notification to the NDWEE of each such subsequent increase. This will not apply to emissions that already have emission rates that are normalized to production and/or throughput rates.

(3) The notification shall include the date of the changes, a description of the changes made, and an evaluation of the expected impact on emissions from the emissions units and/or control equipment.

(4) The following definitions apply for purposes of Condition I.(I)(2) above:

(a) "rate" shall mean the production or throughput of an emissions unit in the same units of production or throughput as the "tested rate" as defined below; and,

(b) "tested rate" shall mean the production or throughput rate of an emissions unit as recorded in the most recent valid performance test and reported to the NDWEE in the source's written copy of the test results, or test report, documenting the maximum capacity of the unit(s). The tested rate shall be extrapolated to daily. Examples include, but are not limited to, tons per hour to tons per day or gallons per hour to gallons per day.

(5) The above notification requirements do not apply when compliance with the emission limitation is demonstrated through the use of a CEMS, PEMS or COMS.

(J) No person shall cause or allow emissions, from any source, which are of an opacity equal to or greater than twenty percent (20%), as evaluated by an EPA approved method, or recorded by a continuous opacity monitoring system operated and maintained pursuant to 40 CFR Part 60 Appendix B except as provided for in Chapter 15, Sections 001.05 or 001.06 (Title 129, Chapter 15, Section 001.04).

(K) Open fires are prohibited except as allowed by Title 129, Chapter 15, Section 002.

(L) Particulate Matter – General Requirements (Title 129, Chapter 15, Section 003):

(1) The source shall not cause or permit the handling, transporting or storage of any material in a manner which allows particulate matter to become airborne in such quantities and concentrations that it remains visible in the ambient air beyond the property line.

(2) The source shall not cause or permit the construction, use, repair or demolition of a building, its appurtenances, a road, a driveway, or an open area without applying all reasonable measures to prevent particulate matter from becoming airborne and remaining visible beyond the property line. Such measures include, but are not limited to, paving or frequent cleaning of roads, driveways and parking lots; application of dust-free surfaces; application of water; and planting and maintenance of vegetative ground cover.

(M) Testing:

(1) Performance testing if required by this permit or required by the NDWEE shall be completed as follows:

(a) The source shall provide the NDWEE a written notice at least thirty (30) days prior to testing to afford the NDWEE an opportunity to have an observer present. The NDWEE may, in writing, approve a notice of less than 30 days. If the testing is pursuant to an underlying requirement contained in a federal rule, the notice provisions of the underlying requirement apply (Title 129, Chapter 15, Section 005.03).

(b) The notification required by Condition I.(M)(1)(a) shall include the following (Title 129, Chapter 15, Section 005.03):

(i) Facility Name, Address and FID number.

(ii) Company Name, Address and Contact Person's name.

(iii) Test schedule including date and estimated start time of testing.

(iv) List all applicable regulatory requirements that testing is being conducted for (permit condition, MACT, NSPS, etc.).

(v) Types of pollutants to be sampled including applicable emission limits and demonstration requirements.

(vi) Test methods and documentation of any proposed variations from the specified procedures and reason for variance.

(c) Testing shall be conducted according to the methodologies found in Title 129, Chapter 15, Section 005.02, or other NDWEE approved methodologies (Title 129, Chapter 15, Section 005.02).

(d) Performance tests shall be performed under those representative (normal) conditions that: represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition. (Title 129, Chapter 15, Section 005).

(e) Performance tests shall be conducted for a minimum of three (3) one-hour runs unless another run-time is specified by the applicable Subpart or as deemed appropriate by the NDWEE.

(f) The source shall monitor and record the operating parameters for process and control equipment during the performance testing required in the permit.

(g) A certified written copy of the test results, signed by the person conducting the test, shall be provided to the NDWEE within sixty (60) days of completion of the test, unless a different time period is specified in the underlying requirements of an applicable federal rule, and will, at a minimum, contain the following items (Title 129, Chapter 15, Section 005.02G):

(i) A description of:

1. The operating parameters for the emissions unit during testing. Examples include, but are not limited to, production rates, process throughputs, firing rates of combustion equipment, or fuel usage; and,

2. The operating parameters for the control equipment during testing. Examples include, but are not limited to, baghouse fan speeds, scrubber liquid flow rates, or pressure drop across the control device.

(ii) Copies of all data sheets from the test run(s).

(iii) A description and explanation of any erroneous data or unusual circumstance(s) and the cause for such situation.

(iv) A final conclusion section describing the outcome of the testing.

II. GENERAL CONSTRUCTION PERMIT CONDITIONS

The following General Conditions apply to this permit unless otherwise provided for in the Specific Conditions of this permit.

(A) The source shall provide the following notifications to the NDWEE:

(1) The date construction, reconstruction, or modification commenced as defined in Chapter 1. Notification shall be received by NDWEE no later than thirty (30) days after such date and include a summary description of the event associated with the commencement of construction. The source may use either of the following to determine that construction commenced (Title 129, Chapter 3, Section 003.02):

(a) Initiating physical on-site construction activities of a permanent nature that meet the definition of "begin actual construction" or

(b) Entering into binding agreements or contractual obligations. If this option is used, the notice shall also include a brief summary of each binding agreement or contractual obligation entered into, the date of the agreement or contract, and why the agreement or contract cannot be cancelled or modified without substantial loss to the source.

(2) Notification of the date on which the source or modification first becomes operational, shall be received by the NDWEE within fifteen (15) days after such date (Title 129, Chapter 6, Section 002.01A).

(3) Any emissions due to malfunctions, unplanned shutdowns, and ensuing start-ups that are, or may be, in excess of applicable emission limits shall be reported to the NDWEE in accordance with Title 129, Chapter 15, Section 006.05.

(B) Approval to construct, reconstruct, and/or modify the source will become invalid if a continuous program of construction is not commenced within 18 months after the date of issuance of the construction permit except upon a showing by the source that the complexity of the construction, reconstruction and/or modification requires additional time, or if construction, reconstruction or modification is discontinued for a period of 18 months or more, or if construction, reconstruction and/or modification is not completed within a reasonable period of time (Title 129, Chapter 3, Section 003.02).

(C) This permit is not transferable to another location, unless otherwise specified in this permit (Title 129, Chapter 3).

(D) Holding of this permit does not relieve the source from the responsibility to comply with all applicable portions of the Nebraska Air Quality Regulations and any other requirements under local, State, or Federal law. Any permit noncompliance shall constitute a violation of the Nebraska Environmental Protection Act and the Federal Clean Air Act, and is grounds for enforcement action or permit revocation (Title 129, Chapter 3, Section 001).

(E) Any source who failed to submit any relevant facts or who submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. If the permittee wishes to make changes at the source that will result in change(s) to values, specifications, and/or locations of emission points that were indicated in the permit application (or other supplemental information provided by the permittee and reviewed by the NDWEE in issuance of this permit), the source must notify the NDWEE before the change(s) can be made. In addition, the source must notify the NDWEE if any modification which may result in an adverse change to the air quality impacts predicted by atmospheric dispersion modeling (such

as changes in stack parameters or increases in emission rates, potential emissions, or actual emissions). The permittee shall provide all necessary information to verify that there are no substantive changes affecting the basis upon which this permit was issued. Information may include, but not be limited to, additional engineering, modeling, and ambient air quality studies (Title 129, Chapter 3, Sections 002.02B, 002.03B, and 002.03C).

(F) When requested by the NDWEE, the permittee shall submit completed emission inventory forms for the preceding year to the NDWEE by March 31 of each year (Title 129, Chapter 11).

(G) If required, performance tests shall be conducted in accordance with Standard Condition I.(M) within sixty (60) days after first reaching the maximum capacity, but not more than 180 days after the start-up of operations of each unit, unless otherwise specified by the NDWEE (Title 129, Chapter 15, Section 005.07).

(H) If applicable, the following conditions apply to the verification of NAAQS modeling analysis (Title 129, Chapter 2):

(1) The stack dimensions of the emission points identified in the air dispersion modeling analysis shall be constructed such that the reliability of the air dispersion modeling analysis associated with the permit application is maintained. A site survey or similar documentation containing the as-built stack dimensions, shall be maintained on-site and kept for the life of the source. If the as-built stack dimensions do not meet the criteria used in air dispersion modeling analysis, the permittee shall notify the NDWEE prior to start-up of any emission unit associated with a stack not meeting the above criteria and, if requested by NDWEE, submit a revised air dispersion modeling analysis to NDWEE to ensure that the source will not interfere with the attainment or maintenance of the ambient air quality standards in Title 129 Chapter 2.

(2) The source shall sufficiently restrict public access to the source at the ambient air boundary relied upon in the air dispersion modeling analysis for the NAAQS compliance demonstration. A site survey, or similar documentation containing the locations of the boundary vertices, shall be maintained on-site and kept for the life of the source. If the boundary dimensions do not comply with the boundary information in the air dispersion model (plus or minus 25 meters), the permittee shall notify the NDWEE prior to start-up of any emission unit and, if requested, submit a revised air dispersion modeling analysis to the NDWEE to ensure that the source will not interfere with the attainment or maintenance of the ambient air quality standards in Title 129 Chapter 2.

III.(A) Specific Conditions for Material Processing

(1) Permitted Emission Points:

(a) The source is permitted to construct the emission points and associated emission units identified in the following table at the maximum quantities listed. Each emission unit shall be controlled by the required control equipment as indicated:

Emission Point ID#	Required Control Equipment Description	Emission Unit Description	Maximum Quantity
EP-CRUSH1	CE Wet Suppression	EU Primary Crusher	1
EP-CRUSH2	CE Wet Suppression	EU Secondary Crusher	1
EP-CRUSH3	CE Wet Suppression	EU Tertiary Crusher	1
EP-SCREEN1	CE Wet Suppression	EU Primary Screen	1
EP-SCREEN2	CE Wet Suppression	EU Secondary Screen	1
EP-SCREEN3	CE Wet Suppression	EU Tertiary Screen	1
EP-RECYCLE	CE Wet Suppression	EU Crusher Recycle Conveyor	1
EP-CONVEY	CE Wet Suppression	EU Process Conveyors	11[1]
EP-UNLOAD	-	EU Truck Unloading	N/A[2]
EP-LOAD	-	EU Product Loading	N/A[2]

[1] Each process conveyor run must be a continuous movement on a single conveyor with no material transfer points. A facility may count multiple conveyors in parallel as a single run, provided they split total throughput and there is no operating scenario where the combined annual throughput for the parallel conveyors could exceed the total annual production limit.
[2] Loading and unloading are limited by the annual production limit, facilities may use any configuration for, or number of, loading and unloading stations.

(b) The quantity of emission units authorized by this permit at the aggregate processing plant covered under this permit shall not exceed the quantities identified in Condition III.(A)(1)(a). (Chapter 3)

(c) The maximum individual capacities of EU Primary Crusher, EU Secondary Crusher, and EU Tertiary Crusher shall not exceed 500 tons of crushed aggregate per hour. (Chapter 3)

(2) Emission Limitations and Testing Requirements:

(a) The emissions limitations of Title 129, Chapter 15, Sections 001.01 and 001.04 apply to the emission points in Condition III.(A)(1)(a); with the exception that Section 001.04 does not apply to any emission point subject to 40 CFR 60, Subpart OOO. (Chapter 15)

(b) The emission limitations and required test methods of 40 CFR 60, Subparts A and OOO (as of the issuance date of this permit) are identified in the following table. The intent of this condition is only to identify the applicable Federal emission limitations and test methods and is not to establish any new or different requirements than the underlying Federal Standard. Refer to 40 CFR 60, Subparts A and OOO for additional testing and emission limitation requirements that may apply to applicable emission units at the aggregate processing plant. (Chapter 12)

Emission Point Description	Pollutant	Permitted Limit	Basis for Limit	Testing Method
All screening operations, transfer points on belt conveyors, and enclosed truck or railcar loading stations at plants that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	Opacity	≤ 10%	40 CFR 60, Subpart OOO Chapter 12	Method 9[1]
All crushers at which a capture system is not used that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	Opacity	≤ 15%	40 CFR 60, Subpart OOO Chapter 12	Method 9[1]
All screening operations, transfer points on belt conveyors, and enclosed truck or railcar loading stations at plants that commence construction, modification, or reconstruction on or after April 22, 2008	Opacity	≤ 7%	40 CFR 60, Subpart OOO Chapter 12	Method 9[1]
All crushers at which a capture system is not used that commence construction, modification, or reconstruction on or after April 22, 2008	Opacity	≤ 12%	40 CFR 60, Subpart OOO Chapter 12	Method 9[1]

[1]The testing method is to be Method 9 with additional requirements for certain situations. Refer to 40 CFR 60 Subpart OOO for additional information.

(c) The source shall conduct performance tests on all screening operations, transfer points on belt conveyors, enclosed truck or railcar loading stations, and crushers in accordance with testing requirements and emission limitations required by 40 CFR 60 Subpart OOO not later than 180 days after start-up of operation in the state of Nebraska. (Chapter 12 and 15)

(i) Condition III.(A)(2)(c) shall not apply to fixed sand and gravel plants and crushed stone plants with rated capacities of 25 tons per hour or less.

(ii) Condition III.(A)(2)(c) shall not apply to portable sand and gravel plants and crushed stone plants with rated capacities of 150 tons per hour or less.

(d) The NDWEE may waive the testing requirement of Condition III.(A)(2)(c) if the source submits valid performance test results demonstrating compliance with the emission limitations of 40 CFR 60 Subpart OOO. (Chapter 15)

(3) Operational and Monitoring Requirements and Limitations:

(a) All crushers, screens, and process conveyors shall be directly equipped with water or wet suppression spray bars to control particulate emissions. (Chapters 3, 12, and 15)

(i) There shall be a steady flow of water coming out of the spray bars at all times the associated emission unit is in operation.

(ii) The source shall conduct daily observations of the nozzles on each spray bar each day the associated emission unit is in operation. If corrective action is necessary it shall be taken immediately to ensure proper operation of the spray bars.

(b) The source shall not produce more than 3,750,000 tons of crushed aggregate per any period of twelve (12) consecutive calendar months. At no time during the first eleven (11) calendar months after permit coverage is obtained shall the source produce more than 3,750,000 tons of crushed aggregate. (Chapter 3)

(c) The source shall only crush aggregate, which is defined as: crushed or broken stone, sand or gravel, recycled concrete, or any mixture the majority of which consists of crushed or broken stone, sand or gravel, recycled concrete, or other nonmetallic mineral as defined in 40 CFR 60, Subpart OOO. (Chapter 3)

(d) A source representative shall conduct visible emissions surveys of the emission units identified in Condition III.(A)(1)(a) on a daily basis during daylight hours when the facility is operating to determine whether there are visible emissions, leaks, or other indications that may necessitate corrective action. If corrective action is required, it shall occur immediately. (Chapter 15)

(i) The results of the visible emissions surveys shall be recorded in a log, which shall include, at a minimum, the following items:

1. The emission points included in the survey.
2. All emission points from which visible emissions occurred (except for water vapor).
3. Corrective action(s) taken.
4. Emission points for which the units were not in operation during the survey.
5. Each entry shall be dated and initialed by the person conducting the visible emissions survey.

(e) The source shall comply with the applicable operational and monitoring requirements and limitations of 40 CFR 60, Subparts A and OOO. (Chapter 12)

(4) Applicable NSPS, NESHAP, and MACT Requirements:

The emission units identified in Condition III.(A)(1)(a) may be subject to the applicable NSPS requirements listed below:

Applicable Requirement	Title	Rule Citation
NSPS, Subpart A	General Provisions	Chapter 12, Sec. 001.01 40 CFR 60.1
NSPS, Subpart OOO	Nonmetallic Mineral Processing Plants	Chapter 12, Sec. 001.66 40 CFR 60.670

(5) Reporting and Recordkeeping Requirements:

(a) Records shall be kept documenting the maximum individual capacities of EU Primary Crusher, EU Secondary Crusher, and EU Tertiary Crusher.

(b) Records shall be kept documenting the daily inspection of the nozzles on each spray bar and the corrective actions taken if needed.

(c) Records shall be kept documenting the weight of aggregate produced for each calendar month and each period of twelve (12) consecutive calendar months.

(d) Records shall be kept documenting the type of aggregate processed.

(e) The source shall maintain a copy of the visible emissions survey logbook.

(f) The source shall comply with the applicable recordkeeping and reporting requirements established in 40 CFR 60, Subparts A and OOO.

III.(B) Specific Conditions for Engines

(1) Permitted Emission Points:

(a) The source is permitted to construct the emission points and associated emission units identified in the following table at the maximum capacity and fuel type listed:

Emission Point ID#	Emission Unit Description	Total Capacity (HP)	Permitted Fuel Type
EP-ENGINE	EU Engines	825	Diesel

(b) The total aggregate stationary engine capacity authorized by this permit at the aggregate processing plant covered under this permit shall not exceed 825 horsepower. (Chapter 3)

(2) Emission Limitations and Testing Requirements:

(a) The emissions limitations of Chapter 15, Sections 001.02 and 001.04 applies to the emission points identified in Condition III.(B)(1); with the exception that Section 001.02 does not apply to any emission point subject to a more stringent requirement in 40 CFR Part 60, Subpart IIII. (Chapter 15)

(b) The source shall comply with the applicable emission limitations and testing requirements as specified in 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ for all stationary engines. (Chapters 12 and 13)

(3) Operational and Monitoring Requirements and Limitations:

(a) The source shall be limited to 3,000 operating hours per any period of twelve (12) consecutive calendar months for each engine. At no time during the first eleven (11) months after permit coverage is obtained shall the operating hours for each engine exceed 3,000 hours. (Chapter 3)

(i) Each stationary engine shall be equipped with a non-resettable hour meter to record the operating hours.

(b) The source shall comply with the applicable operational and monitoring requirements and limitations as specified in 40 CFR Part 60 Subparts A and IIII and 40 CFR Part 63 Subparts A and ZZZZ for all stationary engines. (Chapters 12 and 13)

(4) Applicable NSPS, NESHAP, and MACT Requirements:

The emission units identified in Condition III.(B)(1)(a) may be subject to the applicable NSPS and NESHAP requirements listed below:

Applicable Standard	Title	Rule Citation
NSPS, Subpart A	General Provisions	Title 129, Chapter 12, Sec. 001.01 40 CFR 60.1
NSPS, Subpart IIII	Stationary Compression Ignition Internal Combustion Engines	Title 129, Chapter 12, Sec. 001.80 40 CFR 60.4200
NESHAP, Subpart A	General Provisions	Title 129, Chapter 13, Sec. 002.01 40 CFR 63.1
NESHAP, Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines	Title 129, Chapter 13, Sec. 002.78 40 CFR 63.6580

(5) Reporting and Recordkeeping Requirements:

(a) Records shall be kept documenting the total aggregate stationary engine capacity.

(b) The source shall record and maintain records documenting the hours of operation for

each stationary engine for each calendar month and for each period of twelve (12) consecutive calendar months.

(c) The source shall comply with the applicable reporting and recordkeeping requirements as specified in 40 CFR Part 60 Subparts A and IIII and 40 CFR Part 63 Subparts A and ZZZZ for all stationary engines.

III.(C) Specific Conditions for Haul Roads

(1) Permitted Emission Points:

All on-site haul roads with production-related traffic shall comply with the following conditions. (Chapters 3 and 15)

(2) Emission Limitations and Testing Requirements:

Haul roads are subject to the requirements of Title 129, Chapter 15, Section 003.02.

(3) Operational and Monitoring Requirements and Limitations:

(a) The owner or operator shall utilize best management practices (BMP) on haul roads. The effectiveness of the BMP to minimize emissions from haul roads will be demonstrated by compliance with Standard Condition I.(L). (Chapters 3 and 15)

(b) A survey of the plant property and haul roads shall be conducted for each day of operation during daylight hours to determine if visible fugitive emissions are being generated and leaving plant property. Implementation of BMP shall be taken upon observation of visible fugitive emissions leaving plant property. (Chapter 15)

(4) Applicable NSPS, NESHAP, and MACT Requirements:

The NDWEE has not identified any NSPS, NESHAP, or MACT requirements that apply to the haul roads.

(5) Reporting and Recordkeeping Requirements:

(a) Records shall be kept documenting the use of BMP on haul roads.

(b) Records shall be kept documenting the date and time of fugitive dust surveys, whether visible emissions crossed site boundaries, and any corrective action taken if visible emissions are observed in areas to which the public has access.

IV. Specific Conditions for Relocation

(A) The owner or operator shall notify the Director at least 20 days in advance of any proposed change in source location. The following information shall be provided for the proposed new location: (Chapter 6 Section 004)

(1) A specific description of the source, including Standard Industrial Classification (SIC),

(2) A legal description, accurate to the nearest quarter section,

(3) Present or previous use,

(4) Distance to the nearest occupied building,

(5) General description of the site location and adjacent land use,

(6) The anticipated dates of operation of the source at the proposed new location,

(7) Contact information for the responsible on site source operator including: name, mailing address, and telephone number,

(8) The source FID number assigned by the Department, and

(9) The relocation notification shall be signed by a responsible source official or source owner certifying its content.

(B) Relocation within any of the following jurisdictions will require additional notifications:

(1) Lancaster County (Neb. Rev. Statute §81-1504(23))

(a) If the proposed new location is within Lancaster County, the source shall also notify the Air Quality Section of the Lincoln-Lancaster County Health Department (LLCHD) at least 20 days in advance of the proposed location change An additional permit may also be required from LLCHD if the source intends to locate within this jurisdiction.

(2) City of Omaha (Neb. Rev. Statute §81-1504(23))

(a) If the proposed new location is within 3 miles of the Omaha Corporate City limits, the source shall also notify the Air Quality Section at Omaha Air Quality Control (OAQC) at least 20 days in advance of the proposed location change. An additional permit may also be required from OAQC if the source intends to locate within this jurisdiction.

(3) Tribal Lands

(a) If the proposed new location is on Tribal Lands, the source shall also notify and receive approval from the United States Environmental Protection Agency Region VII office and/or the Tribe, as appropriate, at least 20 days advance of the proposed location change. An additional permit may also be required if the source wants to locate within these jurisdictions.

(4) Cass County (Chapter 2)

(a) If the proposed new location is within Cass County, Nebraska, rock processing operations at the source are subject to Chapter 2 requirements requiring 85% reduction in potential emissions from conveying, transfer operation, and railcar and truck loading. Demonstration of the 85% reduction in potential emissions must be submitted with the change in source location notification. An air quality

impact analysis, including dispersion modeling, may also be required to ensure compliance with Title 129, Chapter 2 prior to locating in Cass County.

(C) The Director may disapprove a new proposed location for a temporary source if operation in the new location would cause or contribute to a violation of state or local standards or otherwise adversely affect human health or the environment. (Chapter 6 Section 004)

Fact Sheet for Permit Number: GCP-CRUSH-2
Date: November 3, 2025

Typical Standard Industrial Classification Code: 1429, Crushed and Broken Stone, Not Elsewhere Classified

Typical North American Industry Classification System Code: 212319 – Other Crushed and Broken Stone Mining and Quarrying

DESCRIPTION OF GENERAL CONSTRUCTION PERMIT:

The Nebraska Department of Water, Energy, and Environment (NDWEE) has determined there are numerous similar sources in Nebraska that are subject to the same Federal and State regulatory requirements. Chapter 7 of Nebraska Administrative Code Title 129 – Air Quality Regulations allows the NDWEE to issue a general construction permit (GCP) for these sources. This GCP follows the applicable procedures of Chapters 3, 7, and 10 of Title 129. The owner of a source that qualifies for this GCP must apply to the NDWEE for coverage under the applicable terms of the GCP. Each application must include all information necessary to determine qualification for, and to ensure compliance with, the GCP.

The NDWEE will notify the applicant of the determination of coverage under this GCP for the source identified in the application. If the Director of the NDWEE denies coverage of the source under the GCP, the applicant may request an adjudicative hearing in accordance with the procedures established in Title 115 – Rules of Practice and Procedure. The NDWEE may issue coverage under a GCP to an individual source without repeating the notice and comment procedures required in Chapter 10 of Title 129. The NDWEE shall maintain a list of all sources covered by general permits, which shall be available for public review.

DESCRIPTION OF THE SOURCE GROUP:

This general permit is for aggregate processing plants that may be portable or stationary. An aggregate processing plant means a combination of fixed or portable equipment for the processing of aggregate including each crusher, screening operation, belt conveyor, bagging operation, and truck or railcar loading station, power sources such as generators, power units and engines, and petroleum storage tanks. Aggregate means crushed or broken stone, sand or gravel, recycled concrete, or any mixture the majority of which consists of crushed or broken stone, sand or gravel, recycled concrete, or other nonmetallic mineral as defined in NSPS Subpart OOO. Coverage under this GCP will authorize the construction of a crushing facility no larger than the following: one primary crusher, one secondary crusher, one tertiary crusher, one primary screen, one secondary screen, one tertiary screen, truck unloading operations, product loading operations, one crusher recycle stream, eleven process conveyors operating in parallel, and internal combustion engines with up to 825 combined horsepower capacity.

Coverage under this general permit may be granted to new facilities which only consist of the operations listed above, or to existing facilities. Operations at existing facilities may be covered by one or more additional permits.

TYPE AND QUANTITY OF AIR CONTAMINANT EMISSIONS ANTICPATED:

An aggregate processing plant will have the capability to emit the following regulated air pollutants: particulate matter (PM), PM with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), PM with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), oxides of sulfur (SO_x), oxides of nitrogen (NO_x), carbon monoxide (CO), volatile organic compounds (VOCs), hazardous air pollutants (HAPs), and greenhouse gases (GHGs). The potential emissions calculations have been calculated using a pre-determined quantity of each process. This general permit is only for aggregate processing plants that have equal to or less than the quantity for each process.

The typical operations at an aggregate processing plant are discussed in further detail below. The fact sheet attachment shows the potential emissions calculations with full references.

Concrete Crushing and Material Handling
Stock material is usually delivered by truck to the aggregate processing plant and unloaded into a storage pile. From here, an excavator is used to transfer concrete to the primary crusher. Once crushed, the product may be conveyed to a secondary crusher or even tertiary crusher or may be conveyed to a primary screening plant. Material greater than a certain size is usually sent back to the primary crusher as a recycle stream via a conveyor, and material less than a certain size may be transferred from the primary screen plant to a secondary and tertiary screen plant or may be conveyed to an additional process conveyor. This additional conveyor loads produced material into separate storage piles. Produced material is then hauled out by truck. The concrete crushing and material handling operations will have the capability to emit PM, PM_{10}, and $PM_{2.5}$.

The potential emissions for this general permit have been calculated based upon the following operations: one primary crusher, one secondary crusher, one tertiary crusher, one primary screen, one secondary screen, one tertiary screen, truck unloading operations, product loading operations, one crusher recycle stream, and eleven process conveyors operating in parallel. The use of wet suppression bars is required on all material handling processes. If a source has more equipment or operations than that listed in this paragraph, or does not intend on using wet suppression bars, then the source is not applicable for this general permit.

Combustion Equipment

An aggregate processing plant may have either non-road or stationary engines that power various operations. The NDWEE considers any engine that meets the definition in 40 CFR 89.2 as a nonroad engine. Based upon this definition, typical nonroad engines might be: those which power front-end loaders; those mounted to wheels, skids, or trailers which are moved at least once per year; or those used to move attached equipment. Those engines which don't meet the nonroad definition and aren't vehicle engines are usually stationary engines and must be included in a facility's emissions.

The total aggregate horsepower of all stationary engines at the aggregate processing plant may not exceed 825 horsepower. Each engine may combust only diesel fuel and will be limited to a maximum of 3,000 operational hours per year. The stationary engine(s) will have the capability to emit PM, PM_{10}, $PM_{2.5}$, SO_x, NO_x, CO, VOCs, HAPs, and GHGs.

Storage Piles
An aggregate processing plant may have multiple storage piles, typically consisting of stock material and produced material, which are sources of fugitive PM, PM_{10}, and $PM_{2.5}$ emissions.

Haul Roads
An estimated distance of 500 feet of unpaved haul road travel within the aggregate processing plant has been assumed for product receiving and product shipping. The haul roads will be a source of fugitive PM, PM_{10}, and $PM_{2.5}$ emissions that must be controlled by best management practices.

Emissions Summary
The following table lists the maximum, non-fugitive, potential emissions for an aggregate processing plant covered under this general permit. A facility with other sources of emissions, such as equipment covered by another construction permit, must add the maximum potential emissions from those activities with the potential emissions as listed below when considering project specific air dispersion modeling thresholds and operating permit classification.

Regulated Pollutant	Emissions (tons/year)
Particulate Matter (PM)	30.75
PM smaller than or equal to 10 microns (PM_{10})	14.77
PM smaller than or equal to 2.5 microns ($PM_{2.5}$)	5.25
Sulfur Dioxide (SO_2)	2.51
Oxides of Nitrogen (NO_x)	38.20
Carbon Monoxide (CO)	8.23
Volatile Organic Compounds (VOC)	3.12

Regulated Pollutant	Emissions (tons/year)
Hazardous Air Pollutants (HAPs)	0.03
Greenhouse Gases (GHG):	
Mass Basis	1,413
CO_2e Basis	1,417

APPLICABLE REQUIREMENTS AND VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS:

Chapter 2 – Ambient Air Quality Standards:
Based on the limits in this GCP, the potential emissions of all regulated air pollutants from this permitting action are below the air dispersion modeling thresholds for which modeling is typically required, as established in the NDWEE modeling guidance document titled *PSD and Minor Source Modeling (August* 2017). As a result, the NDWEE does not expect this source to cause or contribute to any violations of any ambient air quality standards.

Chapter 3 – Construction Permit Requirements:
The source is required to obtain a construction permit for the aggregate processing plant because the potential emissions, prior to general construction permit coverage, exceed the thresholds of Chapter 3, Section 001.03A. The source must submit an application fee in order to apply for coverage under this GCP, in accordance with Chapter 3, Section 002.01 and Chapter 7. The NDWEE does not include the PTE for PM when determining the fee for a construction permit, note that the PTE for PM_{10} and $PM_{2.5}$ is still considered.

Chapter 6 – Operating Permit Requirements:
For the operating permit program, a major or Class I source is one that emits, or has the potential to emit, greater than 100 tons per year (tpy) of any criteria pollutant, 10 tpy of any individual HAP, 25 tpy of total HAPs, or 5 tpy of lead. A minor or Class II source is any facility which does not exceed the major source thresholds but has actual emissions greater than one half of these thresholds.

Before issuance of coverage under this permit, the potential emissions from facilities may or may not exceed the major source thresholds. Most facilities will not have other significant sources of air pollutants and will therefore be a "No Permit Required – Synthetic Minor" or "No Permit Required – Natural Minor" source for the operating permit program because potential and actual emissions will be below the minor source thresholds after coverage is issued.

However, a facility with other sources of emissions, such as equipment covered by another construction permit, may exceed Class II or Class I thresholds for the operating permit program. Each facility covered by this GCP must determine if they are obligated to apply for an operating permit, or revise an existing operating permit, due to coverage under this general construction permit. Fugitive emissions may or may not need to be included when determining operating permit program applicability depending on if the source is or isn't one of the listed categories in 40 CFR 52.21.

Chapter 12 – New Source Performance Standards (NSPS), and 40 CFR Part 60:
An aggregate processing plant may be subject to NSPS Subparts OOO and IIII. If a source is subject to one of these NSPS, it is also subject to NSPS Subpart A. If a source is subject to NSPS Subpart(s) OOO and/or IIII, the applicable requirements from NSPS Subpart A are described in NSPS Subparts OOO and IIII. These subparts are summarized below.

The NDWEE has identified the following NSPS as potentially applicable to an aggregate processing plant:

Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants: This subpart, adopted by reference in Title 129, Chapter 12, Section 001.66, applies to crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations located at fixed or portable nonmetallic mineral processing plants that commenced

construction, modification, or reconstruction after August 31, 1983. The source may be subject to this subpart if the maximum crushing capacity is greater than 150 tons per hour for a portable source, and 25 tons per hour for a stationary source. This subpart contains emissions, notification, reporting, and record-keeping requirements for subject aggregate processing plants. If a source is subject to this subpart, a one-time performance test must be or must have been performed for all affected processes in accordance with Subpart OOO.

Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines: This subpart, adopted by reference in Title 129, Chapter 12, Section 001.80, applies to stationary compression ignition (CI) internal combustion engines (ICE) that were manufactured after April 1, 2006, or were modified or reconstructed after July 11, 2005. The subpart limits emissions of CI ICE based on engine size (hp, cylinder displacement), type of use (emergency or non-emergency), and model year. The engines at the source may be subject to this subpart. If the source only has nonroad engines (not stationary), then the source is not subject to this subpart.

It is the source's obligation to comply with all applicable NSPS subparts and requirements regardless of their inclusion in this permitting action or Title 129. These rules are subject to change. Additional and updated information on all NSPS is on the NDWEE NSPS Notebook, which can be located by visiting the NDWEE website at http://dee.ne.gov, and first selecting the "Air" tab, then the "Air Grants, Planning and Outreach Program" dropdown menu tab, then the "New Source Performance Standards (NSPS) Program" dropdown menu tab, and then select "New Source Performance Standards (NSPS) Program". Or alternately use the "Search NDWEE Web" search box on the upper right of the webpage and enter "New Source Performance Standards".

Chapter 13 – Hazardous Air Pollutant Emission Standards (NESHAPs):
The source is an area source of HAPs if the PTE for any single HAP is below 10 tons per year and the PTE for total HAPs is below 25 tons per year; otherwise, if the PTE exceeds those thresholds, the source is a major source of HAPs. The NDWEE has identified that an aggregate processing plant may be subject to NESHAP Subparts A and ZZZZ. These subparts are summarized below.

The NDWEE has identified the following NESHAP as potentially applicable to an aggregate processing plant:

Subpart A – General Provisions: This subpart, adopted by reference in Title 129, Chapter 13, Section 002.01, applies to the owner or operator of any stationary source subject to a NESHAP unless otherwise stated in the rule.

Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines: This subpart, adopted by reference in Title 129, Chapter 13, Section 002.78, applies to existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE) located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand and existing residential, commercial, and institutional emergency RICE at area sources used for 15 hours or less per year for emergency demand response, provided they are not also used for local reliability. The stationary engine(s) at the source may be subject to Subpart ZZZZ if they are stationary RICE at an area or major source. This subpart has different requirements based upon the specifications of each engine.

It is the source's obligation to comply with all applicable NESHAP subparts and requirements regardless of their inclusion in this permitting action or Title 129. These rules are subject to change. Additional and updated information on all NESHAP is on the NDWEE Air Toxics Notebook, which can be located by visiting the NDWEE website at http://dee.ne.gov, and first selecting the "Air" tab, then the "Air Grants, Planning and Outreach Program" dropdown menu tab, then the "Air Toxics Program" dropdown menu tab, and then select "Air Toxics Program". Or alternately use the "Search NDWEE Web" search box on the upper right of the webpage and enter "Air Toxics".

Chapter 15 – Particulate Matter Emissions:
Section 001.01 – Process Weight Rate: Based on the calculated PM emissions in the Fact Sheet Attachment, each aggregate processing plant will comply with the requirements of this section by properly operating and maintaining all emission units.

Section 001.02 – Particulate Emissions from Combustion Sources: Each engine has a maximum allowable emission rate of 0.60 pounds of PM per MMBtu as identified in Chapter 15, Section 001.02, Table 15-2. As shown in the Fact Sheet Attachment, each aggregate processing plant will comply with this regulation by combusting only diesel fuel, and by properly operating and maintaining all emission units. In accordance with Section 001.06, if an engine at the source is subject to an NSPS PM emission limitation that is more stringent than the limitation provided in this chapter, then that engine is not subject to Section 001.02.

Section 001.04 and 001.05E – Opacity: No person may cause or allow emissions which are of an opacity equal to or greater than twenty percent (20%) as evaluated by an EPA-approved method or recorded by a continuous opacity monitoring system. The source must perform visible emission surveys and must take corrective actions if visible emissions are observed. Additionally, NSPS Subpart OOO specifies opacity limits on certain equipment; therefore, for processes subject to NSPS Subpart OOO, compliance with the NSPS Subpart OOO opacity limits will demonstrate compliance with Section 001.04, in accordance with Section 001.05E.

SPECIFIC PERMIT CONDITIONS DISCUSSION:

III.(A) Specific Conditions for Material Processing:

III.(A)(1) This condition permits the source to construct the applicable listed material handling processes and associated control equipment and specifies the maximum quantity and capacity allowable for each process. Each EU Process Conveyor may be a single run of multiple conveyors operating in parallel, provided they split the total throughput.

III.(A)(2) The source may be subject to, and must comply with, applicable emission limitations and testing requirements of 40 CFR 60, Subparts A and OOO. If subject, the source must complete, or must have completed, the initial performance testing in accordance with 40 CFR 60, Subpart OOO. The source may submit earlier performance test results to the NDWEE instead of performing new testing. The NDWEE will determine if the submitted test results are considered satisfactory or if new testing will be required.

40 CFR 60, Subpart OOO has additional testing requirements for facilities with capture systems. While capture systems are not required under this GCP, a source must comply with those requirements in 40 CFR 60, Subpart OOO that apply to it if it operates with a capture system.

III.(A)(3) The source is required to control all crushers, screens, and process conveyors with a wet suppression system which includes spray bars directly attached on each emission unit. The source may not produce more than 3,750,000 tons of crushed aggregate per any period of twelve consecutive months; this crushed aggregate must fall under the definition of crushed aggregate as found in 40 CFR 60, Subpart OOO. Production must be limited to reduce potential emissions of PM_{10}, and the source must only crush aggregate to prevent the source from becoming subject to additional NSPS and NESHAP Subparts. The source must perform daily visible emission surveys during the hours of operation to ensure that there are no visible emissions from the stack or exhaust points of all emission units, leaks, or atypical monitoring parameters. By requiring daily observations, the NDWEE is confident that any malfunctions will be detected and corrected quickly. Both the surveys and any corrective actions must be documented. The source is subject to, and must comply with, applicable operational and monitoring requirements and limitations of 40 CFR 60, Subparts A and OOO.

III.(A)(4) This condition identifies the applicable federal regulations that may apply to the material processing operations.

III.(A)(5) This condition identifies reporting and recordkeeping requirements to ensure compliance with all of the applicable requirements of Condition III.(A).

III.(B) Specific Conditions for Engines:

III.(B)(1) This condition permits the source to construct engines and specifies the maximum total aggregate stationary engine capacity, in hp, and permitted fuel type, listed as diesel, but this also includes both No. 1 and No. 2 fuel oil.

III.(B)(2) This condition specifies that the emission point(s) may be subject to the requirements of Chapter 15, Section 001.04; NSPS Subpart IIII; and NESHAP Subpart ZZZZ. In accordance with Chapter 15, Section 001.06, the emission point(s) is not subject to the requirements of Chapter 15, Section 001.02, if a more stringent NSPS limitation applies to the emission point(s).

III.(B)(3) This condition identifies the operational and monitoring requirements associated with the emission unit(s). An operational limitation on the combined annual operating hours of the engine(s) is required. The source is required to install a non-resettable hour meter to determine the number of hours each engine is used. The engine(s) is also required to comply with any operational and monitoring requirements of NSPS Subparts A and IIII, and NESHAP Subparts A and ZZZZ.

III.(B)(4) This condition identifies the applicable federal standards that may apply to the engine(s).

III.(B)(5) This condition identifies reporting and recordkeeping requirements to ensure compliance with all of the applicable requirements of Condition III.(B).

III.(C) Specific Conditions for Haul Roads:

This condition specifies the requirements for unpaved haul roads. The facility must use best management practices to prevent fugitive dust from escaping the property and comply with Chapter 15. If necessary, the facility must implement necessary corrective actions, which might include water application, gravel, speed limits, or road maintenance.

IV. Specific Conditions for Relocation:

This condition provides the source with the requirements associated with relocation of the aggregate processing plant operation. The source must notify the NDWEE each time the aggregate processing plant is relocated. The source is required to obtain the necessary permits and approvals from either Omaha Air Quality or Lincoln Lancaster Health Department prior to locating within Omaha city limits or Lancaster County, respectively. Relocation on Tribal Lands is outside the NDWEE's jurisdiction. The source must contact the US EPA Region VII office or the specific Tribe to determine permit requirements within Tribal jurisdictions. If the source relocates into Cass County, they will become subject to Title 129, Chapter 2 Section 005, which imposes additional requirements.

Fact Sheet Attachment

Potential Emissions Summary

Permit-Limited Production and Capacities

Aggregate Processing Plant Production Limit:	3,750,000	tons/year
Total Stationary Engine Capacity and Hours	825	hp
Usage Limited Under Permit Coverage:	3,000	hrs/year

Summary of PTE (tons/year)

Process Description	PM	PM_{10}	$PM_{2.5}$	SO_X	NO_X	CO	VOC	HAPs
Materials Process	28.07	12.09	2.56	-	-	-	-	-
Storage Piles	1.20	0.60	0.18	-	-	-	-	-
Haul Roads	142.12	32.97	3.30	-	-	-	-	-
Stationary Engine	2.69	2.69	2.69	2.51	38.20	8.23	3.12	3.36E-02
Total PTE (Including Fugitive Emissions)	174.07	48.34	8.73	2.51	38.20	8.23	3.12	3.36E-02
Total Non-Fugitive PTE (Excludes Emissions from Storage Piles and Haul Roads)	30.75	14.77	5.25	2.51	38.20	8.23	3.12	3.36E-02

Emission Unit Summary

Process Description	Emission Point ID#	Required Control	Combustion Capacity	Fuel Type
Primary Crusher	EP-CRUSH1	Wet Suppression	-	-
Secondary Crusher	EP-CRUSH2	Wet Suppression	-	-
Tertiary Crusher	EP-CRUSH3	Wet Suppression	-	-
Primary Screen	EP-SCREEN1	Wet Suppression	-	-
Secondary Screen	EP-SCREEN2	Wet Suppression	-	-
Tertiary Screen	EP-SCREEN3	Wet Suppression	-	-
Crusher Recycle Transfer Points	EP-RECYCLE	Wet Suppression	-	-
Conveyor Transfer Points	EP-CONVEY	Wet Suppression	-	-
Truck Unloading	EP-UNLOAD	-	-	-
Product Loading	EP-LOAD	-	-	-
Diesel-Fired Engine(s)	EP-ENGINE	-	825 hp	Diesel
Stock Material Storage Pile	FS-1a	-	-	-
Produced Material Storage Pile	FS-1b	-	-	-
Haul Roads	FS-2	-	-	-

Fact Sheet Attachment

Material Processing: EP-CRUSH1, EP-CRUSH2, EP-CRUSH3, EP-SCREEN1, EP-SCREEN2, EP-SCREEN3, EP-UNLOAD, EP-LOAD, EP-RECYCLE, EP-CONVEY

Controlled Material Processing Emission Factors chosen due to requirement of Wet Suppression Control

Max Material Throughput (tons/hr): 500 Max Material Throughput (tons/yr): 3,750,000

Operation	Material Throughput (tons/hour)[1]	Quantity of Operations	Material Throughput (tons/year)[1]	Emission Factors (lb/ton)[2]			Emission Rate (lbs/hour)			Emission Rate (tons/year)		
				PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Primary Crusher	500	1	3,750,000	0.0012	0.00054	0.00010	0.60	0.27	0.05	2.25	1.01	0.19
Secondary Crusher	500	1	3,750,000	0.0012	0.00054	0.00010	0.60	0.27	0.05	2.25	1.01	0.19
Tertiary Crusher	500	1	3,750,000	0.0012	0.00054	0.00010	0.60	0.27	0.05	2.25	1.01	0.19
Primary Screen	500	1	3,750,000	0.0022	0.00074	0.000050	1.10	0.37	0.03	4.13	1.39	0.09
Secondary Screen	500	1	3,750,000	0.0022	0.00074	0.000050	1.10	0.37	0.03	4.13	1.39	0.09
Tertiary Screen	500	1	3,750,000	0.0036	0.0022	0.0006	1.80	1.10	0.32	6.75	4.13	1.20
Truck Unloading	500	1	3,750,000	3.20E-05	1.60E-05	4.67E-06	1.60E-02	8.00E-03	2.34E-03	6.00E-02	3.00E-02	8.76E-03
Product Loading	500	1	3,750,000	0.00020	0.00010	0.00003	0.10	0.05	1.46E-02	0.38	0.19	5.48E-02
Crusher Recycle Transfer Points[3]	100	2	750,000	0.00014	4.60E-05	1.30E-05	2.80E-02	9.20E-03	2.60E-03	0.11	3.45E-02	9.75E-03
Conveyor Transfer Points[3]	500	22	3,750,000	0.00014	4.60E-05	1.30E-05	1.54	0.51	0.14	5.78	1.90	0.54
Total							7.48	3.22	0.68	28.07	12.09	2.56

[1]Material Throughput Rates are based on the production limitation in GCP-CRUSH-2. The source is not limited on a ton/hour basis, but on a ton/yr basis. Hourly emission rates included for the Chapter 15 calculations. It's assumed that 20% of the crushed material must be sent back to the crusher.

[2]Emission Factors are from AP-42 Section 11.19.2 Table 11.19.2-2 (8/2004) and PM, $PM_{10,}$ and $PM_{2.5}$ fractions are from "Final Methodology to Calculate PM2.5 and PM2.5 Significance Thresholds, Appendix A: Updated CEIDARS Table with PM2.5 Fractions" when AP-42 did not provide PM, $PM_{10,}$ and $PM_{2.5}$ emission factors.

[3]Each conveyor consists of two conveyor transfer points. GCP-CRUSH-2 limits the source to 11 process conveyors and 1 recycle stream conveyor. Each process conveyor may be a single run of multiple conveyors operating in parallel, provided they split the total throughput.

Fact Sheet Attachment

Diesel-Fired Engine(s): EP-Engine

Total Engine Output (hp)[1]	825
Total Engine Heat Input (MMBtu/hr)[2]	5.775
Maximum Hours of Operation (hrs/yr)[1]	3,000

Diesel Engines < 600 hp Emission Factors chosen to represent the worst-case operating scenario

Pollutant	Emission Factor[3] (lb/MMBtu)	Emission Rate (lbs/hr)	Emission Rate (ton/year)
PM	0.31	1.79	2.69
PM_{10}	0.31	1.79	2.69
$PM_{2.5}$	0.31	1.79	2.69
SO_x	0.29	1.67	2.51
NO_x	4.41	25.47	38.20
CO	0.95	5.49	8.23
VOC	0.36	2.08	3.12
Greenhouse Gases			
CO_2 [4]	163.05	941.64	1,412
CH_4 [5]	6.61E-03	3.82E-02	5.73E-02
N_2O[5]	1.32E-03	7.64E-03	1.15E-02
GHGs (mass basis)		941.68	1,413
CO_2e basis[6]		944.81	1,417
Hazardous Air Pollutants			
Benzene	9.33E-04	5.39E-03	8.08E-03
Toluene	4.09E-04	2.36E-03	3.54E-03
Xylenes	2.85E-04	1.65E-03	2.47E-03
1,3-Butadiene	3.91E-05	2.26E-04	3.39E-04
Formaldehyde	1.18E-03	6.81E-03	1.02E-02
Acetaldehyde	7.67E-04	4.43E-03	6.64E-03
Acrolein	9.25E-05	5.34E-04	8.01E-04
Total PAH	1.68E-04	9.70E-04	1.46E-03
Total HAPs	3.87E-03	2.24E-02	3.36E-02

[1]Total Engine Output and Maximum Hours of Operation are based on the limitations in GCP-CRUSH-2. The source is allowed to have any combination of diesel engines but cannot exceed a total engine output of 825 hp.

[2] Calculated using an average brake-specific fuel consumption of 7,000 Btu/hp-hr taken from AP-42 Table 3.3-1 (10/1996).

[3] Emission factors from AP-42, Chapter 3.3 (10/1996), Tables 3.3-1 and 3.3-2. Emission factors are for diesel but are assumed to be equivlent for No. 1 and No. 2 fuel oil.

[4] Emission factor from 40 CFR 98 Table C-1 (11/29/2013). Converted to lb/MMBtu.

[5] Emission factor from 40 CFR 98 Table C-2 (11/29/2013). Converted to lb/MMBtu.

[6] 40 CFR 98 Table A-1 as published October 30, 2009.

Fact Sheet Attachment

Storage Piles: FS-1a and FS-1b

Equation (5) for Total Suspended Particulate from Wind Erosion of Active Storage Piles[1]

$$EF = 1.7 \times \left(\frac{s}{1.5}\right) \times \left(\frac{365 - p}{235}\right) \times \left(\frac{f}{15}\right) \times \left(\frac{1}{24}\right)$$

EF: Total suspended particulate emission factor (lb/day/acre)

s: Silt Content Material (%)[2]

p: Number of days with greater then 0.01 in. of precipitation per year[3]

p = 90

f: % of time unobstructed wind speed exceeds 12 mph at mean pile height[4]

f = 31

As written, the equation calculates TSP. It is assumed that 50% of the TSP equals PM_{10}, and 30% of PM_{10} is $PM_{2.5}$.[5]

EP ID	Description	Silt Content (%)	Exposed Surface Area (Acres)	PM Emission Factor (lb/hr-acre)	PM_{10} Emission Factor (lb/hr-acre)	$PM_{2.5}$ Emission Factor (lb/hr-acre)	PM PTE (ton/yr)	PM_{10} PTE (ton/yr)	$PM_{2.5}$ PTE (ton/yr)
FS-1a	Stock Pile	1.6	0.75	0.18	0.09	2.74E-02	0.60	0.30	0.09
FS-1b	Produced Pile	1.6	0.75	0.18	0.09	2.74E-02	0.60	0.30	0.09
						TOTAL:	1.20	0.60	0.18

[1] From *Air Pollution Engineering Manual* (1992), Chapter 4: Fugitive Emissions

[2] AP-42 Table 13.2.4-1 (11/2006) for crushed limestone.

[3] From AP-42 Figure 13.2.1-2(1/2011). Based upon the majority of Nebraska having a mean number of 90 days.

[4] From AWDN Wind Summary Information for Nebraska. Based on an average taken from wind roses for Nebraska from 1996 to 2012 from the High Plains Regional Climate Center. The entire occurrence from 10-15 mph was included to be conservative.

[5] From AP-42 Appendix B.2 (9/1996) Table B.2.2 Category 3.

Fact Sheet Attachment

Haul Roads: FS-2

Paved roads {AP-42 Chapter 13.2.1 (1/11)}

Equation (2): *(modified)*

$$E = k \times (sL)^{0.91} \times (W)^{1.02} \times \left(1 - \frac{P}{4 \times 365}\right)$$

	k
PM	0.011
PM_{10}	0.0022
$PM_{2.5}$	0.00054

Unpaved roads {AP-42 Chapter 13.2.2 (11/06)}

Equation (1a): *(modified)*

$$E = k \times \left(\frac{sC}{12}\right)^{a} \times \left(\frac{W}{3}\right)^{b} \times \left(\frac{365 - P}{365}\right) \times \left(\frac{S}{30}\right)^{d} \times (1 - CE)$$

	k	*a*	*b*	*d*
PM	4.9	0.7	0.45	0.3
PM_{10}	1.5	0.9	0.45	0.5
$PM_{2.5}$	0.15	0.9	0.45	0.5

Haul Road / Traffic Parameters

Activity / Road Description	Road Type / Silt Value		Roundtrip Length (feet)		Truck Weight (tons)			Ave. Speed (mph)	Unrestricted Maximum Throughput (units/yr)	Ave. Truck Capacity (units/truck)		Annual VMT
			empty	full	empty	full	Ave.					
Stock Material Receiving	u	6.00	500	500	15	40	27.5	15	3,750,000	25	ton	28,409
Produced Material Shipping	u	6.00	500	500	15	40	27.5	15	3,750,000	25	ton	28,409

Emission Calculations

Activity / Road Description	Emission Factors (lb/VMT)			Potential Emissions (tons/yr)		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Stock Material Receiving	5.00	1.16	0.12	71.06	16.49	1.65
Produced Material Shipping	5.00	1.16	0.12	71.06	16.49	1.65
Total Annual Emissions:				142.12	32.97	3.30

Description of Constants/Variables

E: haul road emissions (lb/VMT)

k, d: dimensionless constants from AP-42 Chapter 13.2.1 (1/11) (paved)

k, a, b, c, d: dimensionless constants from AP-42 Tables 13.2.1-1 (1/11) & 13.2.2-2 (11/06) (unpa

sL: silt loading (g/m^2) of paved road surface

sC: silt content (%) of unpaved road surface

W: average vehicle weight (tons)

P: days/yr with at least 0.01" of precipitation

P = 90 default = 90

S: mean vehicle speed on road (mph) default = 30, minimum =15

CE: unpaved road, dust control efficiency

CE = 0 % default = 0%

VMT: vehicle miles traveled

Fact Sheet Attachment

Chapter 15 PM Emissions Limitations for Aggregate Processing Plants

Title 129, Chapter 15, Section 001.01

For process weight rates up to 60,000 lbs/hr: $E= 4.10\ p^{0.67}$

For process weight rates in excess of 60,000 lbs/hr: $E= 55.0\ p^{0.11}-40$

where E = rate of emissions in lbs/hr PM and p = process weight rate in tons/hr.

Process	P		E		Maximum Unit PM emission rate	
Primary Crusher	1,000,000	lbs/hr	68.96	lbs/hr	0.60	lbs/hr
	500	tons/hr				
Secondary Crusher	1,000,000	lbs/hr	68.96	lbs/hr	0.60	lbs/hr
	500	tons/hr				
Tertiary Crusher	1,000,000	lbs/hr	68.96	lbs/hr	0.60	lbs/hr
	500	tons/hr				
Primary Screen	1,000,000	lbs/hr	68.96	lbs/hr	1.10	lbs/hr
	500	tons/hr				
Secondary Screen	1,000,000	lbs/hr	68.96	lbs/hr	1.10	lbs/hr
	500	tons/hr				
Tertiary Screen	1,000,000	lbs/hr	68.96	lbs/hr	1.80	lbs/hr
	500	tons/hr				
Truck Unloading	1,000,000	lbs/hr	68.96	lbs/hr	0.02	lbs/hr
	500	tons/hr				
Product Loading	1,000,000	lbs/hr	68.96	lbs/hr	0.10	lbs/hr
	500	tons/hr				
Crusher Recycle Transfer Point	200,000	lbs/hr	51.28	lbs/hr	0.01	lbs/hr
	100	tons/hr				
Conveyor Transfer Points	1,000,000	lbs/hr	68.96	lbs/hr	0.07	lbs/hr
	500	tons/hr				

Title 129, Chapter 15, Section 001.02, Table 15-2

Total Heat Input (MMBtu/hr)	Maximum Allowable Emissions of PM (lbs/MMBtu)
10 or less	0.6
Between 10 and 10,000	$1.026/I^{0.233}$ Where I = total heat input in MMBtu/hr.
10,000 or more	0.12

Process equipment	Maximum MMBtu/hr	Allowable PM (lbs/MMBtu)	Unit PM emission rate (lbs/MMBtu)
Diesel-Fired Engine(s)	5.78	0.60	0.31